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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/598,099	08/17/2006	Vojislav Jurisic	VLA24201	1033

7590 07/01/2008
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EXAMINER

TRIEU, THAI BA

ART UNIT	PAPER NUMBER
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3748

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07/01/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/598,099	Applicant(s) JURISIC, VOJISLAV	
	Examiner Thai-Ba Trieu	Art Unit 3748	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 April 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 12-14 is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Office Action is in response to the Amendment filed on April 28, 2008. Applicant's cooperation in amending the claims to overcome the claim objections relating to informalities as well as indefinite claim language is also appreciated.

Specification

The substitute specification filed on April 28, 2008 is approved for entry.

This application is in condition for allowance except for the following formal matters:

1. IN THE ABSTRACT:

The Abstract should be corrected as following for addressing grammatical errors.

A method and **an** apparatus ~~[[consisting of]]~~ **include** a motor housing (1) ~~[[within which rotates]]~~, **an** internal space cylindrical rotor (2) **rotating** together with radial placed work cylinder (3) and piston (6), ~~[[which via]]~~ **a** connecting rod (7) and **a** connecting axle (9) connected with oscillating lever (8), and ~~[[which via]]~~ **a** pin (10) **to** transfer~~[[s]]~~ rotary moment to **the** internal space cylindrical rotor (2), ~~[[i.e. to]]~~ **and** output shafts (17) and (20). ~~[[At the same time]]~~ **Simultaneously**, connecting rod (7), via connecting axle (9) by its own motion, moves satellite gears (12), which off-center mounted swinging bearing rings (13) and symmetrically geared to off-center mounted inner tooth gears (11), define

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position of radial placed work cylinder (3) **being** relative to two outer dead centerss and two inner dead centerss.

2. IN CLAIMS:

Claims should be corrected as following for addressing grammatical errors, consistency of claims, and distinguishing many openings.

12. (New) An elliptical rotary **internal combustion** motor ~~[[with internal combustion]]~~ comprising:

(a) a motor housing (1) having a cylindrical ring shape; said motor housing (1) further comprising:

at least one intake port (15);

at least one spark plug opening (14);

at least one exhaust port (16) ~~[[.]]~~ ;

a regulating sub-pressure opening (19) ~~[[for regulating sub-pressure]]~~;

~~[[an]]~~ **a flushing and cooling** opening (24) ~~[[for flushing and cooling]]~~;

a cooling chamber (21);

wherein said at least one intake port (15); said at least one spark plug opening (14); said at least one exhaust port (16) ~~[[,]]~~ **said regulating sub-pressure** opening (19) ~~[[for regulating sub-pressure]]~~; said **flushing and cooling** opening (24) ~~[[for flushing and cooling]]~~ and said cooling chamber (21) are ~~[[situated,]]~~ **positioned** on circumference in ~~[[its]]~~ **a** vertical plane of symmetry, from each other at distance relative to initial position of a motor mechanism and according to kinematic-geometric characteristics;

(b) an internal space cylindrical rotor (2) rotating within said motor housing (1); said an internal space cylindrical rotor (2) further comprising:

a connecting axle (9);

an oscillating lever (8);

a connecting rod (7);

a satellite gears.(12);

swinging bearing rings (13);

internal space cylindrical rotor openings (23, 25);

shafts (17, 20); and

a radial placed work cylinder (3); said radial placed work cylinder

(3) further comprising:

a piston (6) having a longitudinal axis being perpendicular to an axis of a center of said elliptical rotary motor; said piston (6) placed inside said radial placed work cylinder (3) connected to connecting rod (7);

a work cylinder cap (4) having on a bottom side flattened surface and a ring shaped groove, being situated on a top side of said radial placed work cylinder (3) for closing said radial placed work cylinder (3), and having sealant grooves (5) on an upper surface to prevent leaking of fuel-air mixture and exhaust gases;

wherein said work cylinder cap (4) ~~[[having]]~~ **has an** upper cylinder shaped surface with a radius equal to said internal space cylindrical rotor (2), and in a vertical axis coaxial with a longitudinal axis of said radial placed work cylinder (3) ~~[[having]]~~ **has an** opening in the middle **of said work cylinder**;

wherein said piston (6) includes a dome shape matching an inner portion of said work cylinder cap (4), at least one groove for piston rings and moves cyclically as said internal space cylindrical rotor (2) rotates;

wherein said internal space cylindrical rotor (2), which is cylinder shaped, has an opening on an upper portion for receiving said radial placed work cylinder (3) having a longitudinal axis being perpendicular to the longitudinal axis of said internal space cylindrical rotor (2), and openings to the left and to the right side of

said radial placed work cylinder (3) for cooling; and has an opening on lower portion of said internal space cylindrical rotor (2) for receiving said satellite gears (12), said connecting axle (9), said oscillating lever (8) and said connecting rod (7); and

wherein on [[a]] **the** top side of said opening of said radial placed work cylinder (3), being perpendicular to the axis of said radial placed work cylinder (3), said flattened surface is for receiving said work cylinder cap (4) to close said radial placed work cylinder (3);

(c) inner tooth gears (11) being on lateral sides of said [[stator]] **motor housing** (1);

wherein said connecting axle (9) [[to which are]] connected said oscillating lever (8) and said connecting rod (7), is [[placed]] **positioned** in said opening on said lower portion of said internal space cylindrical rotor (2), under said radial placed work cylinder (3);

wherein said connecting axle (9) [[is with]] **has** both ends connected to said satellite gears (12) [[:]] **such that** every point on **a** longitudinal axis of said connecting axle (9) during [[rotate]] **a rotation** on of said internal space cylindrical rotor (2) moves cyclically along imagined closed ellipse curve defining mode of change of displacement of said work chamber of said radial placed work

cylinder (3) as a function of change of angle of rotation of said internal space cylindrical rotor (2);

wherein said connecting rod (7) and said oscillating lever (8) are connected via needle bearing at a central portion of said connecting axle (9);

wherein said oscillating lever (8) [[has one end , which is shackle,]] **shackingly** connected to said connecting axle (9) on the left and on the right side of said connecting rod (7) **on one end**, and on the other end, [[of]] said oscillating lever (8) has a pin (10) connected to the **internal space cylindrical rotor** opening (23) ~~[[of said internal space cylindrical rotor (2)]]~~;

wherein a distance between centers of openings of said oscillating lever (8) defines a slant of said imagined ellipse, a change of displacement of work chamber of said radial placed work cylinder (3), a different duration of work strokes, and simultaneously defines a starting position of motor mechanism;

wherein said satellite gears (12) are placed in said lower portion of said opening of said internal space cylindrical rotor (2) where said satellite gears (12) have, on the lateral sides, **an** opening located outside of the centers and an abeam tooth profile axis of their teeth, where position of said openings defines displacement of work chamber of the said elliptical rotary motor with internal combustion and where said openings serve for connection between said satellite gears (12) via said connecting axle (9) so said satellite gears (12) are parallel connected in position towards each other as in mirror image at distance which is

sufficient for placement of said oscillating lever (8) and said connecting rod (7);
[[and]]

wherein said satellite gears (12) have in centers of [[their]] **the** lateral sides an opening suited for resting on sleeve of said swinging bearing rings (13) where said swinging bearing rings (13) make possible rotation of said satellite gears (12) around their own axis and dictate that during rotation of said internal space cylindrical rotor (2); [[and]]

wherein said satellite gears (12) cyclically oscillate relative to rotating of said longitudinal axis of said radial placed work cylinder (3) [[therefore]] to define a position of said internal space cylindrical rotor (2) and said radial placed work cylinder (3) and length of stroke of said piston (6) relative to said motor housing (1);

wherein said shafts (17, 20) of said internal space cylindrical rotor (2), being on the lateral sides of said radial placed work cylinder (3) are coaxial with the longitudinal axis and form integral said internal space cylindrical rotor (2);

wherein said **internal space cylindrical rotor** openings (23, 25) [[of said internal space cylindrical rotor (2) having]] **have a** position relative to the center of rotation to define mode of change of displacement in said radial placed work cylinder (3) during work cycle;

wherein said inner tooth gears (11) **are** fastened to said motor housing (1) having center of pitch diameter offset relative to said longitudinal axis of said motor housing (1) by the horizontal and vertical eccentricity and [[where]]

wherein said inner tooth gears (11) are geared in the ratio $i=2$ to said satellite gears (12) **to** define kinematic-geometric characteristics of said motor mechanism; and

d) deck-lids (18);

wherein said swinging bearing rings (13) have a ring shape with an inner diameter for mounting on said deck-lids (18); **and wherein** sleeves **are** relative to the centers ~~[[,]]~~ **and** positioned at the distance corresponding to a base half diameter of said satellite gears (12);

where said longitudinal axis of said swinging bearing rings (13) ~~[[are]]~~ **is** parallel to the axis of said sleeves which carry said satellite gears (12), and assures ~~[[their]]~~ **a** simultaneous rotating and oscillating motion;

wherein said deck-lids (18) at the centers have openings for bearings of said shaft (17) and said shaft (20) of said internal space cylindrical rotor (2); ~~[[and]]~~

wherein said deck-lids (18) on ~~[[the]]~~ inner sides have eccentrically situated hubs, whose longitudinal axes are offset relatively **ly** to said longitudinal axis by the horizontal and vertical eccentricity as with said inner tooth gears (11); and

~~[[on which are situated]]~~ **wherein** said swinging bearing rings (13) **positioned on said deck-lids (18)** ~~[[, which]]~~ define a circular trajectory of said satellite gears (12).

13. (New) The elliptical rotary internal combustion motor according to claim 1 said motor housing (1) further comprising a fuel injector positioned in at least one opening (14) when said elliptical rotary internal combustion motor with internal combustion is [[operating as]] a diesel internal combustion motor.

14. (New) The elliptical rotary internal combustion motor according to claim 1, wherein n interconnected elliptic rotary internal combustion motors, serially connected in said axis of rotation of said internal space cylindrical rotor (2) and said longitudinal axis of said radial placed work cylinder (3) phase offset by angle $360/n$.

Conclusion

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 25 USPQ 74, 453 O.G. 213, (Comm'r Pat. 1935).

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thai-Ba Trieu whose telephone number is (571) 272-4867. The examiner can normally be reached on Monday - Thursday (6:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion can be reached on (571) 272-4859. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TTB
June 25, 2008

/Thai-Ba Trieu/
Primary Examiner
Art Unit 3748